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UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 09/853,339
Filed: 5/11/2001
Inventor: Fargo, et al.
Group Art Unit: 3651
Examiner: Tran, Khoi H.
Title: Escalator Support Structure

Mail Stop Appeal Brief-Patents
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Dear Sir:

Responsive to the Examiner's Answer dated August 11, 2005, please consider the following remarks. The appeal brief fee has already been paid. Any additional fees or credits may be charged or applied to Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds.

09/853,339
60,469-025 (OT-4739)

REMARKS

Appellant respectfully reiterates all of the arguments made in the Appeal Brief and in previous Office Action responses to address the Examiner's Answer. Additional arguments, prepared in response to new issues raised in the Examiner's Answer, are set forth below.

A. Obviousness Rejection Over Gschwendtner

The examiner argues that the cladding shown in Figure 1 of Gschwendtner corresponds to appellant's claimed support structure. Appellant respectfully disagrees.

Gschwendtner discloses an escalator 1 with building supports 2, indicated by the vertical arrows in Figure 1. Figure 2 "shows a wall support of a support construction having a framework mode of construction." See col. 2, lines 42-43. As shown, the framework mode of construction includes the compression truss 12, tension truss 13, and framework strut 14. The cladding of Figure 1 clearly does not form any part of the support structure for the escalator.

The examiner also sets forth additional arguments pertaining to Figure 8 of Gschwendtner. In the final rejection, the examiner argued that the wall plate in Figure 8 of Gschwendtner had a solid plate mode of construction and that Gschwendtner taught that screw connections could be replaced by welds. In the Examiner's Answer, the examiner argues that the teaching in Gschwendtner that screw connections could be replaced by welding provides the motivation of using a solid plate having a continuous unbroken surface. "It is obvious that the welding process will eliminate bolt or screw openings within the solid steel plates." Examiner's Answer, Page 8, lines 5-6.

09/853,339
60,469-025 (OT-4739)

A review of Figure 8 of Gschwendtner shows that the screw connections are formed at the portions of overlapping plates, and are indicated by centerlines at the top and bottom of the Figure. If welds replaced these screw connections, the wall support 21 would still not have a continuous unbroken surface. The wall support 21 would still include passage openings 22. The examiner has not provided any arguments detailing why it would be obvious to eliminate these passage openings 22.

In response to appellant's argument that the examiner's conclusion was based on improper hindsight reasoning, the examiner makes the following arguments:

... [I]t must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. Examiner's Answer, Page 8, lines 10-15.

The only disclosure of a support structure assembly for an escalator that includes a rise with a module comprising a steel sheet with a continuous, unbroken and generally planar exterior surface as claimed, is in appellant's disclosure. Figure 8 of Gschwendtner does not disclose a steel sheet having a continuous, unbroken surface. Further, even if the screw connections were replaced with welds, the sheet would still include passage openings. Thus, appellant respectfully asserts that the examiner is improperly using hindsight construction as the basis for an obviousness rejection because the examiner is using knowledge that is gleaned only from appellant's disclosure.

With regard to the sub-modules set forth in claims 27-31 and 33, the examiner argues that Gschwendtner discloses N-shaped modules that have side edges, referring to Figure 2. Appellant is not arguing that the N-shaped structures do not have side edges, appellant is arguing that these

09/853,339
60,469-025 (OT-4739)

side edges are not attached to adjacent N-shaped structures. Claim 28 recites that a first one of the side edges is attached to a first one of the support sub-modules and a second one of the side edges is attached to a second one of the support sub-modules.

The examiner argues that the N-shaped support sections shown in Figure 2 correspond to appellant's claimed support sub-modules. However, these N-shaped structures are not attached to side edges of an adjacent N-shaped structure. Each of the framework struts 14 that form the N-shape is attached to the upper 12 and lower 13 trusses. The framework struts 14 are not attached to each other.

B. Obviousness Rejection Of Kneipp As Modified By Gschwendtner

The examiner argues that the panels 10, 11 of Kneipp are interpreted as being part of the support structure. Appellant respectfully asserts that this is not a reasonable interpretation of Kneipp.

Kneipp discloses a support structure that comprises two main girders 1, 2, vertically positioned tubular braces 9, and diagonally arranged braces 9b. As shown, this support structure comprises a truss structure. The cladding provided by panels 10, 11 clearly does not form any part of the support structure for the escalator.

Even if the cladding could be considered part of the support structure, there is no disclosure in Kneipp indicating that these wall panels present a continuous, unbroken surface as set forth in the claims. The examiner argues that Kneipp discloses this feature but does not indicate specifically where this feature is shown. Figure 1 clearly does not disclose this feature, and Figure 2 is a cross-sectional view that does not show a sheet presenting a continuous,

09/853,339
60,469-025 (OT-4739)

unbroken and generally planar exterior surface from a top edge to a bottom edge and between side edges as claimed.

The examiner admits that Kneipp does not disclose the use of steel sheets but argues that it would have been obvious to have made the Kneipp wall panels out of the steel sheets as taught by Gschwendtner to provide a lightweight escalator. Appellant disagrees.

When it is necessary to select elements from different references in order to form the claimed invention, there must be some suggestion or motivation to make the selection. There is no disclosure in Gschwendtner of any particular benefit to using steel plates in place of the structures already shown in Kneipp. In addition, there is nothing in Kneipp that would have led one of ordinary skill in the art to believe that Kneipp was in any way deficient for Kneipp's purposes or was in need of modification.

Further, even assuming proper motivation exists to modify Kneipp in the manner suggested by the examiner, the modification would still not satisfy all of the claimed elements. The examiner is arguing that Kneipp should be modified to include steel sheets as taught by Gschwendtner. Gschwendtner teaches steel sheets with pass through openings 22. To modify Kneipp with the steel sheets as taught by Gschwendtner would result in steel sheets with pass through openings. This would not result in a steel sheet with a continuous, unbroken surface extending from top to bottom and from side to side.

The examiner further argues that the motivation for combining the references does not stem from the motivation as to how the references are structurally combinable. The examiner states that the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art, and that in the present application the combined teachings of

09/853,339
60,469-025 (OT-4739)

welding steel sheets together to form an escalator support structure provides the motivation to combine the references.

The examiner has misinterpreted appellant's argument. Appellant is arguing that even if proper motivation exists to combine the references, the combination does not disclose, suggest, or teach all of the claimed elements. Kneipp does not disclose a sheet with a continuous, unbroken surface as claimed. Gschwendtner also does not disclose a sheet with a continuous, unbroken surface as claimed. If Kneipp were modified to include a steel sheet as taught by Gschwendtner, then the resultant product would be a steel sheet with pass through openings. Gschwendtner seems to teach away from providing a sheet with a continuous, unbroken surface as claimed. As discussed above, the examiner's modification of Gschwendtner to replace screw holes with welds, does not eliminate the passage openings. Thus, the combination of references does not disclose, suggest, or teach the claimed features.

With regard to the issue of sub-modules set forth in claims 14, 27-31, and 32, the examiner argues that each of the Kneipp modules 10 or 11 is attached to the escalator structure via attachment section 14 and a horizontal plate section (Figure 2). The examiner argues that each of the modules 10, 11 and respective attachment sections constitutes a sub-module.

The examiner initially argued that the wall panels 10, 11 (shown in Figure 2) were the modules and that the support sub-modules corresponded to tubular elements 9. The examiner argued that each of the sub-modules comprised an attachment 14 that attached the edges of the plurality of wall panels 10, 11 together.

Claim 27 clearly recites that one of the support sub-modules includes a steel plate. The examiner argues that the support sub-modules correspond to elements 9, and 14 however, these

09/853,339
60,469-025 (OT-4739)

elements comprise an attachment interface that connects to a tubular element 9. Further, if the examiner is arguing that the wall panels 10, 11 are themselves part of the sub-modules, then there is no disclosure of attaching adjacent side edges of support sub-modules together. Figure 2 of Kncipp shows that panels 10, 11 are attached to tubular elements 9. There is no disclosure that panels on a common side of the escalator are attached to each other along side edges as claimed.

C. 35 U.S.C. 112, First Paragraph, Rejection

Appellant submitted an amendment after final to add the word "side" to claims 14 and 30 to clarify that the module covers an entire side of the escalator machine. The entry of the proposed amendment would clearly have presented the rejected claims "... in better form for consideration on appeal ..." because the overall number of issues for consideration on appeal would have been reduced. 37 CFR 1.116(b)(2). Further, in the prior Board Decision of February 26, 2004 (See Related Proceedings Index), the Board explained in the 35 U.S.C. 112, second paragraph, rejection that such an amendment would address the issue. See Page 9, lines 3-20.

The examiner refused to enter the amendment indicating that the amendment raised new issues that would require further consideration and/or searching. Appellant again traverses this assertion. The examiner's own rejections clearly indicate that the examiner has searched escalator support structures that cover one side of an escalator machine. The examiner has not provided any arguments explaining how the applied references are interpreted to cover an escalator machine on all sides. Further, there are no references showing a steel plate that covers

09/853,339
60,469-025 (OT-4739)

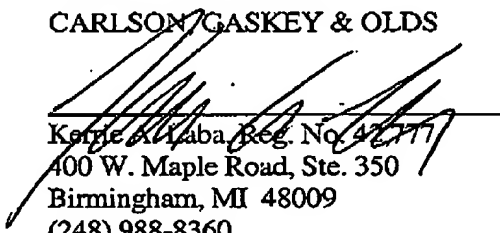
an escalator machine on all sides. The examiner's entire analysis is directed to an escalator support structure that covers a side of the escalator machine. There appears to be no basis for the assertion that the addition of the word "side" to claims 14 and 30 would require any additional searching or analysis on the examiner's part. Thus, appellant again requests entry of the amendment dated April 27, 2005.

CONCLUSION

For the reasons set forth above and in the Appeal Brief, the rejection of all claims is improper and should be reversed.

Respectfully submitted,

CARLSON/GASKEY & OLDS

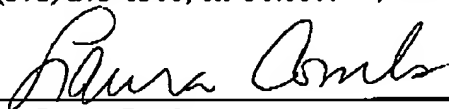


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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (571) 273-8300, on October 11, 2005.



Laura Combs

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